UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/542,377	07/14/2005	Hiroki Ota	KAN-104US	3439

23122 7590 05/10/2007

RATNERPRESTIA
P O BOX 980
VALLEY FORGE, PA 19482-0980

EXAMINER	
TRAN, DALENA	
ART UNIT	PAPER NUMBER
3661	

MAIL DATE	DELIVERY MODE
05/10/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

UNITED STATES DEPARTMENT OF COMMERCE
U.S. Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450

APPLICATION NO./ CONTROL NO.	FILING DATE	FIRST NAMED INVENTOR / PATENT IN REEXAMINATION	ATTORNEY DOCKET NO.
10542377	7/14/05	OTA, HIROKI	KAN-104US

RATNERPRESTIA
P O BOX 980
VALLEY FORGE, PA 19482-0980

EXAMINER
Dalena Tran

ART UNIT	PAPER
3661	20070508

DATE MAILED:

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner for Patents

Office Action Summary	Application No.	Applicant(s)	
	10/542,377	OTA, HIROKI	
	Examiner	Art Unit	
	Dalena Tran	3661	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *14 July 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-20* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-20* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *7/14/05*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Notice to Applicant(s)

1. This application has been examined. Claims 1-20 are pending.

The prior art submitted on 7/14/05 has been considered.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 1-4, 7-8, 10-14, and 17-18, are rejected under 35 U.S.C.103(a) as being unpatentable over Shuman et al. (6577937) in view of Sato (6049295).

As per claim 1, Shuman et al. disclose a navigation device comprising: present position calculating means for calculating present position information of a subject device (see column 4, lines 41-51; and column 8, lines 20-49); and road determining means for determining a feature of a road on which the subject device is currently traveling according to map data (see column 4, lines 23-40; columns 6-7, lines 40-9; columns 8-9, lines 50-10; columns 9-10, lines 66-28; and column 30, lines 27-58). Shuman et al. do not disclose receiving proximity information on another device from said server. However, Sato discloses communication means for transmitting discrimination information for discriminating said subject device and present position information to an external server and for receiving proximity information on another device from server according to said feature of the road (see the abstract; columns 1-2, lines 39-36; columns 6-7, lines 47-67; and columns 8-9, lines 32-15); and display means for displaying the proximity

information on the other device which is received from server (see columns 2-3, lines 51-21; columns 3-4, lines 31-18; and column 8, lines 1-31). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teach of Shuman et al. by combining receiving proximity information on another device from said server to prevent vehicle from colliding to each other.

As per claim 2, Shuman et al. disclose determines that the road on which the subject device is traveling is the road that is low in visibility, the communication means transmits discrimination information and the present position information to server (see columns 8-9, lines 50-10).

As per claims 3-4, Shuman et al. disclose present position information that is transmitted by the communication means includes orientation information and velocity information (see column 18, lines 13-30).

As per claim 7, Shuman et al. do not disclose enables packet communication. However, Sato discloses communication means uses mobile communication that enables packet communication (see the abstract; columns 1-2, lines 39-36; and column 10, lines 27-61). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teach of Shuman et al. by combining enables packet communication to communicate between vehicle and service center to provide navigation information to the vehicle.

As per claim 8, Sato discloses route guidance means for searching a place at which the subject device can cross other device from map data and guides a user to the place when receiving the proximity information on the other device from server (see columns 6-7, lines 47-67; and column 9, lines 16-67).

As per claim 10, Shuman et al. do not disclose proximity information. However, Sato discloses a server comprising: communication means for communicating with a plurality of navigation devices; and proximity information preparing means which receives discrimination information and present position information from said plurality of navigation devices for preparing proximity information indicative of the possibility that a specific navigation device crosses another navigation device on the basis of the discrimination information and the present position information of plurality of navigation devices to transmit the proximity information to specific navigation device (see columns 2-3, lines 51-21; and columns 5-6, lines 58-46). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teach of Shuman et al. by combining receiving proximity information to prevent collision between vehicles, to ensure vehicle safety.

As per claim 11, Sato discloses proximity information preparing means processes, by priority, reception from the navigation device that is high in a predetermined priority (see columns 6-7, lines 47-67).

Claim 12, is a method claim corresponding to device claims 1 and 8 above. Therefore, it is rejected for the same rationales set forth as above.

As per claim 13, Shuman et al. disclose a navigation device comprising: present position calculating means for calculating present position information of a subject device (see column 4, lines 41-51; and column 8, lines 20-49); and road determining means for determining a feature of a road on which the subject device is currently traveling according to map data (see column 4, lines 23-40; columns 6-7, lines 40-9; columns 8-9, lines 50-10; columns 9-10, lines 66-28; and column 30, lines 27-58). Shuman et al. do not disclose receiving proximity information on

another device from said server. However, Sato discloses communication means for transmitting discrimination information for discriminating said subject device and the present position information on said subject device to another device and for receiving discrimination information for discriminating said other device and the present position information on said other device from said other device in the case where the road determining means determines that the feature of the road is a road having an adverse condition (see the abstract; columns 1-2, lines 39-36; columns 6-7, lines 47-67; and columns 8-9, lines 32-15); and display means for displaying the proximity information on the other device which is received from server (see columns 2-3, lines 51-21; columns 3-4, lines 31-18; and column 8, lines 1-31). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teach of Shuman et al. by combining receiving proximity information on another device from said server to prevent vehicle from colliding to each other.

As per claim 14, Shuman et al. disclose present position information that is transmitted by the communication means includes orientation information and velocity information (see column 18, lines 13-30).

As per claim 17, Shuman et al. do not disclose enables packet communication. However, Sato discloses communication means uses mobile communication that enables packet communication (see the abstract; columns 1-2, lines 39-36; and column 10, lines 27-61). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teach of Shuman et al. by combining enables packet communication to communicate between vehicle and service center to provide navigation information to the vehicle.

As per claim 18, Sato discloses route guidance means for searching a place at which the

subject device can cross other device from map data and guides a user to the place when receiving the proximity information on the other device from server (see columns 6-7, lines 47-67; and column 9, lines 16-67).

5. Claims 5-6, 15-16, and 20, are rejected under 35 U.S.C.103(a) as being unpatentable over Shuman et al. (6577937), and Sato (6049295) as applied to claims 3 and 13 above, and further in view of Knockeart et al. (6628233).

As per claims 5, 15, and 20, Shuman et al., and Sato do not disclose error information of at least one of the position information. However, Knockeart et al. disclose present position information that is transmitted by the communication means includes error information of at least one of the position information, the orientation information and the velocity information (see columns 3-4, lines 23-34; and columns 7-8, lines 42-44). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teach of Shuman et al., and Sato by combining error information of at least one of the position information for accurately to locate vehicle position in the road network.

As per claims 6, and 16, Knockeart et al. disclose present position information that is transmitted by the communication means includes destination spot information (see column 2, lines 1-32; and columns 9-10, lines 60-55).

6. Claims 9, and 19, are rejected under 35 U.S.C.103(a) as being unpatentable over Shuman et al. (6577937), and Sato (6049295) as applied to claims 8 and 18 above, and further in view of Murano et al. (6292109).

As per claims 9 and 19, Shuman et al., and Sato do not disclose at least one of a travel direction, a distance to the crossable place from the subject vehicle. However, Murano et al.

disclose the route guidance means searches crossable place, the route guidance means takes into consideration at least one of a travel direction, a distance to the crossable place from the subject vehicle, and a total of turn and twist angles as a parameter (see columns 2-3, lines 59-52; columns 5-6, lines 49-40; and columns 7-8, lines 16-4). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teach of Shuman et al., and Sato by combining at least one of a travel direction, a distance to the crossable place from the subject vehicle to determine vehicle proximity of the subject vehicle to a crossable place.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

. Uhlmann et al. (6553308)

. Videtich (7062379)

. Mathews et al. (7149625)

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dalena Tran whose telephone number is 571-272-6968. The examiner can normally be reached on M-F 6:30 AM-4:00 PM), off every other Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas Black can be reached on 571-272-6956. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Patent Examiner
Dalena Tran

May 8, 2007